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THE KEYSTONE

Defender

C. 3 No. 2

STATE COUNCIL OF CIVIL DEFENSE, HARRISBURG, PA.

APRIL, 1954

RUSSIA AND THE H-BOMB

A LACONIC Soviet announcement of honors to more than 2300 scientists gives a clue to the magnitude of a successful Soviet effort to manufacture a "thermonuclear," or hydrogen, weapon.

The highest orders and medals were bestowed for "years of service and irreproachable work."

Diplomatic sources believe the number of scientists honored may have been much larger than 2300. . . . In the past it has been the Soviet custom to honor in this way those who made possible the realization of some outstanding Government project.

The general belief in Washington has been that the Soviet thermonuclear effort was a "crash" program, into which all available scientific personnel were thrown without regard for expense, in a fashion similar to that employed in the United States during World War II, to produce the first atomic bomb explosion.

Recurrent reports have suggested that the Soviet thermonuclear explosion may have blazed a new and cheaper trail, rather than having followed slavishly the early ideas obtained from Klaus Fuchs, the British atomic spy.

The "conventional" approach to hydrogen explosions, has been based on the use of two types of heavy hydrogen, with an ordinary atomic explosion acting as the trigger.

Published reports have revealed that in the early stages of the U. S. hydrogen bomb effort, there was much opposition to the project because the production of one element of the H-bomb is directly competitive with that of plutonium, which is used in atomic bombs. There was some argument that the hydrogen bomb might be uneconomic because a greater explosive effect could be obtained with the same amount of effort by using nuclear reactors to produce plutonium, rather than to produce the material needed for H-Bombs.

If the Soviet Union has found a cheaper way to produce hydrogen explosions, a way that might open the path to

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NO "NEW PLAN" YET

RECENTLY THERE has been a great deal of loose talk about a "new plan" of Civil Defense, centered around pre-attack evacuation of the people in potential target areas. Let us go easy on this sort of talk until we examine carefully all the factors involved. Much damage can be done if the public gets the wrong idea about it.

1) As yet the best advance warning the Air Force can reasonably guarantee is still 8-10 minutes. All talk

of one to two hours' warning is still far in the future and therefore should not affect past and present instructions regarding emergency action.

2) Any warning at all can be given only for airborne attack; there can be no warning given for attack by missile, either from submarines or from fixed Arctic locations; there can be no warning if attack is made by sabotage. Therefore present CD education, telling the public to "duck and cover" must neither be cancelled nor confused.

3) Warning from the Air Force, dispersed rapidly through Pennsylvania's Bell-and-Light system, will be of little or no use unless means for its prompt dissemination to the public is provided locally. What good

will it be if word reaches the CD office in Big Town, unless Big Town has provided sirens or warning systems to get the warning out immediately to its own people?

4) With the present speed of planes, a one or two hour warning would mean that the planes had been spotted many hundred—perhaps thousands—of miles away. Let us say they are spotted over the polar region. Can we know where they are headed? Will we evacuate every city along our entire northern border? Will we disrupt production and throw ourselves into the confusion of evacuation every time planes are sighted? If so, the enemy could achieve a considerable victory with a few "nuisance" planes,

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NATIONWIDE ALERT

JUNE 14th-15th

FCDA has announced that an alert, including all 48 states, Puerto Rico, Alaska, Hawaii, and ten Canadian provinces will take place on June 14th-15th. The Department of Defense and the U. S. Air Force will also participate in this tremendous training exercise.

The purpose of the alert is to increase the operational effectiveness of all CD organizations, local, state, regional, and national.

This exercise cancels the proposed May 12th Regional Alert; further details will be carried in the May DEFENDER.

Meanwhile, all counties, cities, and towns are urged to start working immediately to have their control centers ready to operate, and to take full advantage of the June alert as a training exercise for all their CD personnel.

NO "NEW PLAN" YET

(Continued from page 1)

merely by zigzagging over our radar screens, and never coming closer!

Let us look realistically, too, at how much damage would be done if the public gets the idea:

"The new plan is rapid evacuation. I'm getting out of here," and takes to the road. Picture for yourself the hopeless traffic snarls, the countless hours of wasted time, the appalling target the clogged roads would make.

If all Pittsburgh and Philadelphia automobile drivers jump into their cars and "hit the road," the following situation could develop:

Philadelphia residents packed in their traffic-stalled vehicles would completely fill all 327 miles of the Turnpike between Philadelphia and the Ohio State line with four lines of cars standing bumper to bumper. At the same time, Pittsburghers would be caught in a single, solid line of vehicles stretching from the Steel Capitol westward to Chicago.

More realistically, perhaps, Philadelphia would be the source of two-lane bumper-to-bumper traffic snarls filling Route 611 north to the heart of the Poconos; Route 309 would be crowded as far as Allentown; cars would be solid down 422 as far as Reading; Lancaster Pike would be blocked all the way to Lancaster, while cars would be jammed down Route 1 to the Maryland border, and filling the entire westbound land of the Turnpike.

In the same way, other two-lane motionless lines north and west from Pittsburgh would fill Route 19 all the way to Erie, others would clog Route 8 to the New York State line, and both Routes 22 and 30 to Ohio. This

of course, assumes that the people of Allentown, Reading, Lancaster, and Erie are not *also* on the move and competing for the same space!

The current talk about evacuation has sprung up as a result of President Eisenhower's budget address which many people read too quickly, without careful consideration.

In that portion of the budget request dealing with civil defense, the President was asking for funds and outlining the proposed use of them. He was speaking for things which *may* come to pass, not those which as yet are accomplished facts. He asked for funds with which to "expand the system of continental defense which coordinates the actions of our radar outposts and our air, naval, and land forces. It will provide improved early warning of enemy attack." (Note the tense: It *will* provide).

The section of his message which has started the evacuation talk says: "This (recommended) budget reflects a new concept of civil defense which takes account of the destructive threat of modern weapons, and which emphasizes improved warning of impending attack and planning for the dispersal of the population of potential target cities in advance of enemy attack." But the President continues: "Much planning, organization, and training remains to be done, however, to make this strategy of civil defense fully effective at all levels of government."

Careful and detailed studies are now being made throughout the land and throughout this State. Searching questions are being asked, and many hours of deep thought are being given to the questions raised by the problem of dispersal.

Because of the likelihood that the enemy will soon be producing hydrogen bombs, if he is not already doing so, such thinking and planning is imperative. Every effort must be made to move as many people as possible from highly dangerous to relatively safe area *if it can be done quickly, in an orderly, pre-planned and effective way with adequate warning time.*

This will never mean the *total* populations of *all* urban areas. It will probably mean hospital patients, children, young mothers, old people; it may mean key personnel whose loss would vitally hamper industrial, military, or civil defense actions following attack. It may mean moving some people only 40-50 blocks—out of the center of the target area—yet

near enough to offices, shops and homes that they can return quickly if the city escapes attack.

The practicality or the impracticality of dispersal of even limited groups prior to attack is dependent on many local factors such as:

- 1) Immediately available transportation facilities (school buses, truck and taxi fleets, trains, subways, etc.);
- 2) Street and highway patterns and the capacities of bridges, tunnels, and the like;
- 3) Population density in the surrounding areas (where would these people go?);
- 4) Possible effect on the general defense effort;
- 5) Forces of police and wardens available to control dispersal;
- 6) Public education program.

Final decision on whether or not people are to be dispersed prior to attack must be made by local officials who have carefully studied these and other factors for their own city. The problem is one for the future because as yet we **DO NOT HAVE A WARNING TIME OVER AN ESTIMATED 10-15 MINUTES AT BEST.**

Therefore, let us be careful that we do not confuse the people; let us be wary of giving the impression that "because of the H-bomb the only thing to do is take to the road"; let us remember that still by far the safest protection is to *seek shelter and stay there.*

QUOTABLE QUOTES

A people that values its privileges above its principles, soon loses both.

President Eisenhower.

* * *

You can't take freedom for granted. I saw freedom for the Czech people destroyed by a small, well-organized Communist minority. But the tragedy was made possible by the indifference of supposedly freedom-loving people like yourselves.

A Czech escapee from behind the Iron Curtain, talking to the American people.

* * *

Despite Pearl Harbor's lesson; despite all our new knowledge of push-button and undeclared war techniques; despite the lives, heartache, dollars and resources we have drained into war and its prevention—this nation today is still only 15 minutes from disaster. It is something to think about.

*Gov. Val Peterson,
FCDA Administrator.*

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Free subscriptions to this publication may be obtained by writing to the State Council of Civil Defense, Capitol Building, Harrisburg, Penna. Address: Miss Alison Raymond, Editor.

TYRONE C. D. GROWS WELL

THE CITY OF Tyrone, in Blair County, has been making good progress in CD, under the able leadership of Mr. Robert K. Meredith.

Recently we got in touch with Mr. Meredith and asked him the secret of his success.

"Anything can be accomplished," he said, "if considerable time and thought is given to ORGANIZATION. Too few people realize the importance of setting up an organization so that it will be practical and operate with efficiency. One must:

- 1) Fire the organization with enthusiasm and purpose—with the idea that the individual is needed;
- 2) Delegate responsibility *with authority to act*;
- 3) Correct, but do not criticize;
- 4) Build, but do not destroy human efforts;
- 5) Educate through lectures, visual education, sub-committee meetings, and exercises;

6) Once a month have the entire organization together for a three-minute report from each division.

7) Be sure that the people responsible for each Division understand what is required of them and of their division.

8) Develop the realization on the part of all involved, that it takes cooperation to build up a practical organization."

Mr. Meredith is obviously well aware of what is needed in developing harmonious and effective human relations; his results show how fundamental such relations are in building an effective force.

"Respect," he says, "is a two-way street. If you want respect, you must give it. Let each Division Chief feel that he knows more about the division than anyone else. Out of our entire organization, I have had to let only two people go—these I quietly asked to resign as they were not interested enough to do a good job."

Mr. Meredith sets an example to his people by working tirelessly himself. He believes that C. D. must be kept before the people continuously. He has appeared before all the clubs, all the PTA's, and all the service organizations within his area. The Tyrone papers are constantly supplied with photographs and articles, which are run prominently, often on page one, because they report real, visible progress. "Publicity is important," Mr. Meredith emphasizes. "Never let it die out."

How far has Tyrone gone?

1141 people are active participants in Civil Defense, not just "names in a file" in the city of Tyrone. They work, attend drills, and turn out for exercises. The Auxiliary Police unit, of about 150 men, is uniformed and



These men have just completed Auxiliary Police training, and received their uniforms. They form an additional resource for the City of Tyrone, for any kind of disaster or emergency

well-trained. The local Red Cross is a division of Civil Defense; the Medical Division works with the Red Cross, and also with a division of 54 trained R. N. nurses.

Tyrone's Ground Observer Post has been on full 24-hour duty since Oct. 1953, and is one of the few Posts in the Commonwealth which is 100% manned. Currently there are 430 observers on its rolls. Each day of the week is assigned as follows:

Monday . . . Elks; Tuesday . . . American Legion and Auxiliary; Wednesday . . . Kiwanis and Rotary; Thursday . . . Moose; Friday . . . VFW and Auxiliary; Saturday . . . Churches; Sunday . . . Borough Wards. Mr. James R. Black, Chief Observer for Tyrone, reports that this plan has worked exceedingly well. Other localities please note!

The Tyrone area has set up its organization somewhat differently from many communities, dividing the task so that there are more shoulders to bear its weight. As in most communities, Mr. Meredith reports to the Burgess. Instead of the familiar 6-8 division breakdown, however, Tyrone has 14, as follows:

- 1) Purchases
- 2) Publicity
- 3) Schools with deputies for Jr. and Sr. High, Parochial, and three localities
- 4) First Aid Training with three deputies, each in charge of a group.
- 5) Nurses and Ambulances, with deputies for:
 - a) Community b) Industry c) Schools
- 6) Red Cross, with deputies for:
 - a) Medical aid b) Canteen c) Evacuation d) Shelter e) Clothing
- 7) Police, with deputies for:
 - a) Traffic b) Auxiliaries c) Mounted

- 8) Fire
- 9) Utilities, with deputies for:
 - a) Water b) Gas c) Electric
- 10) Highways. Under highways, comes Rescue.

11) Industry

The heads of CD in the various large industries of the locality form the sub-heads of this division.

12) Communications

13) Sanitation, including biological warfare and radiological units.

14) G.O.C.

Different localities necessarily work out different organizational plans to fit their own needs and conditions. Many will see in the above marked variations from their own organization plans, and some may wonder at the lack of mention of transportation.

The important thing, however, is this: If, after two years, you find that some particular division in your area is not progressing, perhaps you should consider dividing the load among more deputies. Break it up so that a few earnest souls are not doing all the work. A logical division of labor among several deputies, each responsible for specific phases of the task will broaden the base of interest in the community; it will often get a division off "dead-center" and start new activity.

As Mr. Meredith said, considerable time and energy must go into organization. If yours is not producing results, give it new thought. One way of removing deadwood (and we all know that many communities are suffering from deadwood) is to readjust responsibilities. Nothing should remain static that is not effective. Tyrone has an active group of interested people who work hard and well together. To them go our greetings and respect.

LABOR UNION WORKS FOR C. D.

THE INTERNATIONAL UNION of Electrical, Radio, and Machine Workers, a part of the CIO, has been actively urging its members to take a vigorous part in Civil Defense. Mr. John E. Dillon, an Executive Board member of IUE-CIO, is the CIO representative at FCDA; CIO conventions have repeatedly urged members to work in civil defense in their homes, their communities, and their plants; furthermore, the Community Services Committee, one of the most effective arms of the National CIO, has been appointed to "put civil defense plans into operation."

In order to further this effort, Mr. Dillon is setting up a series of regional CIO meetings, where he will address leaders and rank and file members, and stress the vital importance of a strong defense.

One item he will stress particularly:

"In addition to community work, IUE-CIO and other CIO people should see to it that there are committees in every plant, composed of both union and company representatives, to handle civil defense matters."

Mr. Dillon says that many locals have stressed the importance of plant civil defense work on a joint management-labor basis, as does FCDA in its booklet "Civil Defense in Industry and Institutions." That booklet recommends that:

"A joint management-employee committee for civil defense be organized. If a labor-management committee is already functioning in your facility, it can serve as a means of stimulating employee interest and participation. The employee's representative can be helpful in encouraging personnel to enroll as C. D. volunteers."

Certainly the protection of a plant in case of enemy attack is not only the job of management. The cooperation which has been built up on such community-projects as the Chest drives, other fund raising, blood donations, and, during WW II, bond-buying, can easily be used also for civil defense.

FCDA points out that, with the development of our technological civilization, the natural trend has been toward mass production, specialization, and concentration of plants, businesses, and people.

But, the agency says, such concentrations, while they create efficiency in production and distribution, create

a sort of "Achilles heel" for our country, because they create easier targets for mass-destruction weapons.

Val Peterson, FCDA administrator, gives this advice for action:

1) Formation of a joint labor-management planning committee to work with local civil defense officials;

2) Survey of the plant or building to locate and eliminate possible hazards;

3) Provision of first-aid stations, shelters, and other means of protection such as fire-fighting, rescue, welfare, police, and traffic control;

4) Provision of protection for essential records, either through dispersal of duplicates, or protective construction;

5) Installation of a warning and control system throughout the plant;

6) Review of all available literature on atomic test results—effects on buildings, equipment, machinery, cement, drugs, food, automobiles, houses, etc.

7) Consideration of plant dispersal, underground construction for storage and operations, and other plans for reducing vulnerability;

8) Encouragement of civil defense interest and participation by the individual at work and at home.

CIO representative Mr. Dillon says, "I cannot overemphasize the need for our people to get more active in civil defense. I have learned more and more the importance of this in my daily work at the FCDA headquarters, from reading reports and from personal contacts in the field.

"I urge every IUE-CIO local to set up a civil defense committee, if one has not already been set up, and get the cooperation of your boss. . . . Here is a place where cooperation can work. Let's be sure it does work."

Locals are reminded that the Penna. State Council of Civil Defense maintains a film library at its headquarters in the Capitol Building in Harrisburg; many films (see page 6) are available on free loan to any interested groups. In addition, the State maintains a Civil Defense Training School at Ogontz, Penna., to train instructors for plants, industries, or communities. All interested union members or leaders are urged to take advantage of these services.

(The above material was taken, for the most part, from a series of articles appearing in the IUE-CIO News, and used with permission.)

IT IS A SIMPLE THING

By THOMAS BRUBECK

Civil Defense is the housewife, cleaning the attic.

It is the country doctor, organizing a mobile first-aid team.

It is the school teacher, adapting fire drills to other emergencies.

It is a father, showing his son how to make a splint.

Civil Defense is the mayor, explaining why his town must help other communities if disaster comes.

It is the utilities worker, locating a broken gas main.

It is the fireman, training auxiliaries.

It is the grocery store manager, displaying emergency food supplies.

It is the farmer, donating a pint of blood.

Civil Defense is the editor, writing a series of articles on air raid precautions.

It is the ham radio operator, contacting an isolated city.

It is the high school boy, testing a fire extinguisher.

It is the laundry driver, learning to convert his truck to an ambulance.

It is the welfare worker, making a stove from brick and tin cans.

Civil defense is the city engineer, cataloguing heavy equipment—the psychologist, studying panic—the building superintendent, marking shelter areas.

It is a positive program—as positive as the word "Prepare." The civil defense movement is based on the premise that our vast oceans have been reduced to streams, and that America is now vulnerable to a hundred atomic Pearl Harbors.

Civil defense is a calm, steady approach for conditioning people against the mental and physical shock that would accompany an attack on our cities.

It is your home, your children, your backyard—and civil defense is you, preparing for any emergency. With an effective program we will have the confidence to face whatever may come, and the knowledge we need to cut our losses in half.

(Mr. Brubeck is Public Information Director for C. D. in the state of Oregon.)

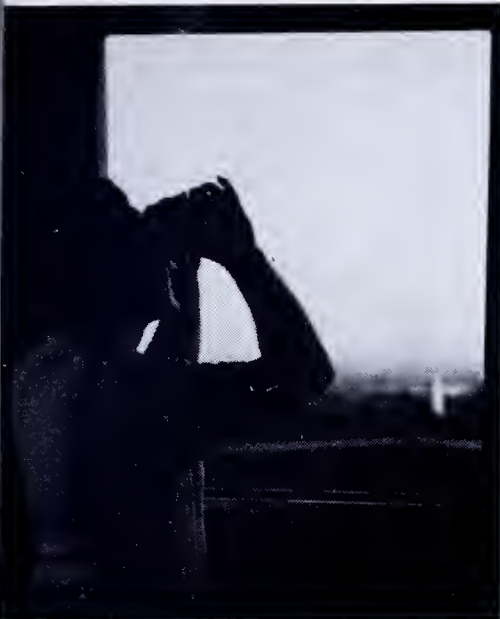
CLERGY HAVE RESPONSIBILITY

Religion and civil defense are linked by a phenomenon called panic, which is both a denial of faith and a defeat of defense. By losing faith, we shall be in danger of losing our souls by panic. Churches should not only be

centers of faith, but also of orderly and thorough preparation for whatever ills may come.

VERY REV. FRANCIS B. SAYRE,
Dean of Washington Cathedral.

WATCHING IS LIKE THIS



The plane is spotted

AIR SPOTTING is all these—sharp eyes and ears, accurate reporting to the nearest Filter Center, and relaxed periods while your “buddy” is on the alert.

The young man pictured on this page is typical of the men and women across our land who give freely and regularly of their time and energy in order to increase the defense of this country against air attack.

His name is Bob Williams. He works in the Leather Lab at E. F. Houghton Co. in Philadelphia. In addition, he attends Temple University at night, studying for a degree in chemistry. He might say, “I have no time for air spotting.” Many people carrying his schedule would say exactly that. But he does not. He watches regularly from midnight Saturday to 6 A. M. Sunday, every week. He is a spotter in the Henry H. Houghton American Legion Ob-

servation Post of Germantown, Penna., and has close to 400 hours to his credit.

“How on earth can you identify a plane on a dark or rainy night?” he was asked, as he made an entry in the log to cover a 2-engine passenger plane flying S. W. over Philadelphia at 4000 feet.

“It isn’t so difficult after you get a little experience,” Bob replied, as he tracked the disappearing aircraft with his binoculars. When the plane had vanished from sight, Bob explained that with practice, an observer can easily determine whether a plane has one, two, or four engines, as well as its direction and approximate height, even though it is invisible from the ground.

“You can also tell, just by the sound, if it is one multi-engined plane, or several single-engined ones. On clear, moonlit nights we can often make positive identification.”

“Do you ever get sleepy on your night shift?” his visitor inquired.

“Very seldom. . . . If I do get really drowsy, I can knock off for forty winks while the other fellow on watch keeps his eyes and ears open. But we seldom sleep. With two of us on duty we always have company. We have a radio, electric heater, magazines, and a kitchen well stocked with coffee, so keeping awake is no problem.”

About 60% of the observers at the Houston O. P. are members of the American Legion. Others, like Bob Williams, are non-veterans and R. O. T. C. students.

Our air defense hinges on four functions:

Detection, identification, intercep-

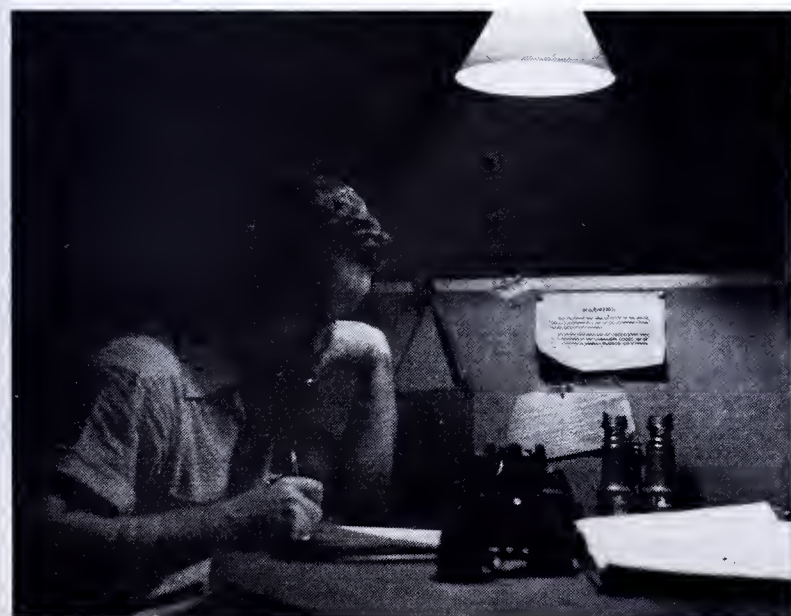
tion, and destruction. Those who watch and report the planes are playing a vital role in the first two functions of detection and identification. The Air Force interceptor planes and their pilots are alert to handle the last two—interception and destruction.

This country’s radar net is not complete; nor, even where it does exist, does it work well under 5000 feet. There are many “holes” in it caused by geographical conditions, such as mountains. Only by the contributed effort of thousands of patriotic citizens will these “holes” be guarded and a surprise air attack, like Pearl Harbor, be made impossible on our shores. Can you spare 3 hours a week? Can your teen-age son or daughter? Can you volunteer together as a team? Why don’t you?

Under present conditions it is quite possible that nine out of ten planes could reach their targets—targets spread across this entire nation. Only one hydrogen bomb would have to get through to destroy the vitals of any of our cities. All of us know that; yet too many of us still do nothing to prevent such a thing from occurring. The more quickly our Air Force fighter planes get into the air, the better are their chances for shooting down or diverting enemy planes before they reach their targets. The more Observer Posts there are manned, alert, and ready to report the approaching planes, the more quickly the Air Force can get its information, make its decisions and order its planes into the air.

Ground Observers can make the difference between a Pearl Harbor or a warned and defended population. Which will it be?

(All photos from Houghtonews)



Information is phoned in to the Filter Center



The spotter relaxes while his partner watches

FREE FILMS FOR YOU

Do ALL Defender readers know that the State Council of Civil Defense maintains a film library in its office in Harrisburg, for the use of any interested groups? These films are available on free loan, on request. The following is the current list of films you may borrow without charge (16 mm, sound):

GENERAL

Operation Doorstep

10 mins. Based on the Civil Defense atomic tests conducted at the Nevada Proving Ground on March 17, 1953. It includes a "stop-motion" special effect sequence showing every detail of what happened to demonstration house #A from the moment it is first illuminated by the A-bomb light until there is nothing visible but dust and flying debris. The value of simple, inexpensive, home-type shelters is emphasized.

V-1 Robot Bomb

9 mins. Excellent film showing guided missiles and effects. Shows the German "buzz-bombs" and what they did to London.

Operation Greenhouse

25 mins. Much of this film is concerned with the preparation for the atomic tests at Eniwetok. It also includes some excellent sequences on the effects of blast on different types of construction.

Our Cities Must Fight

10 mins. Graphically explains why a mass exodus from large cities must never happen—that it would be a victory for the enemy if industry stopped. Much of America's strength lies in her cities.

They Also Serve

17 mins. This film shows the organization of medical and health services for disaster; it is also a good general interest film in that it reviews all the various services in C.D. which must work together to form a systematic and successful response to disaster—particularly in war.

Survival Under Atomic Attack

10 mins. Scenes of devastated Hiroshima illustrate blast, heat, and radiation effects of atomic bombing. The citizen is instructed in ways to act at home.

Tale of Two Cities

17 mins. Shows the destruction of Hiroshima and Nagasaki. Shows the effects of blast on buildings, roads, and bridges. Still a very effective film, though one of the older ones.

Self-Preservation in Atomic Attack

18 mins. Three servicemen demonstrate what individuals should do to protect themselves against an air or underwater explosion. Relative effects of blast, heat, and radiation are shown.

You Can Beat the A-Bomb

20 mins. Personal survival, in the home and at work.

Pattern for Survival

20 mins. Similar film on personal survival. Some sequences on personal protection against a water burst as well as an air burst.

FIRE

Fire's the Enemy

New developments in fire engines, special hose-laying trucks, power extension ladders, etc., in England. It is directed at recruiting for the Auxiliary Fire Service. Rescue exercises on a fire tower are shown, and the film concludes with scenes at a real fire in which auxiliary fighters play their part.

Fire Fighting for Householders

10 mins. Film emphasizes that blast factors are most productive of fire in the home; electric connections can be broken, heating systems dislocated, etc. Although related to CD in atomic warfare, the film applies equally to other fire hazards faced by a householder. Measures suggested are 1) removing objects from path of fire, 2) smothering, 3) cooling the fire.

London Fire Raids

10 mins. Although the sound track is a little difficult, this film is valuable to show because it gives excellent shots of an entire city ablaze. It gives a vivid idea of the magnitude of fires which we, too, may face but few of us have yet imagined. Wonderful photography.

Fire Guard Plan

25 mins. Reel 1 shows a demonstration in which a fire bomb falls into a living room and sets it ablaze, and the warden's technique for putting it out; Reel 2 shows an actual air raid (England, WW II) and illustrates special tasks arising from it; Reel 3 emphasizes the need for care of equipment, and demonstrates the technique of working in smoke-filled rooms.

MEDICAL

First Aid in the Prevention of Shock

26 mins. Produced by the Signal Corps. Deals with several types of wounds, including burns, fractures, head and body injuries; shows how shock may develop from each and how to prevent it.

Medical Services in Atomic Disaster (PMF 5149, III)

28 mins. Good for any adult audience, especially those in first aid or medical groups. Duties and responsibilities of medical personnel in alleviating the disaster caused by atomic bombing.

COMMUNICATIONS

Communications for Civil Defense

32 mins. Produced by Bell Tel. Co. It contains an excellent sequence from the sighting of enemy planes through attack, and into C. D. action following attack. One of the best available portrayals of C. D. in action, in all phases. This film is also good in showing a control organization.

RESCUE

School for Survival

28 mins. Film taken at Ogontz Center to show the rescue training available.

Shots of the Rescue Street, and action pictures to show the techniques taught. Especially recommended to be shown at industries, in firemen's groups, to police classes, and before all types of men's organizations. Shows the steps towards establishing local rescue streets.

G. O. C.

Air Defense

18 mins. Points up the importance of a Ground Observer Corps, and its function in the organization for national defense. Shows the corps in operation when an unidentified plane is reported by a ground observer.

CHILDREN

Duck and Cover

10 mins. A cartoon character, Bert the Turtle, urges youngsters to follow his example and "duck and cover" when danger strikes. Safety directions and rules to follow at school. Also stresses what children should do when away from adult supervision.

(Many of the above films are also suitable for use with young people)

BIOLOGICAL AND CHEMICAL

Biological Warfare for Farmers and Stockmen

9 mins. Made by the State Council for the farmers and stockmen of Penna. Governor Fine, M. Miles Horst, and Dr. Richard Gerstell appear in the film to emphasize the dangers of biological warfare and show ways to avoid them. Good also for 4-H Clubs, Future Farmers, and Grange groups.

Decontamination of Streets

17 mins. Detailed instruction to decontamination squads on clearing blister gas from streets, showing good coordination between wardens and workers in specialized services, following a disaster.

RECRUITING

Waking Point

20 mins. A dramatized story in order to shock people from their lethargy. Good suspense and interesting characters. Produced for C. D. recruitment in Britain where officials are faced with the same indifference as in the U. S.

WARDENS

A Wardens' Training Kit, including a projector and 6 film-strips (not movies), with accompanying recordings, is also available on free loan from the State Council of Civil Defense. Note that the record turntable is NOT, repeat NOT, available, and must be procured locally (33 $\frac{1}{3}$ r.p.m.)

Titles of the film strips are:

1. Map Making for Wardens
2. The Block Census
3. The Role of the Warden in Rescue
4. The Role of the Warden in Fire
5. Conducting a Neighborhood Civil Defense meeting.
6. Reconnaissance Functions of the Block Warden.

This is an excellent and helpful series for those who are conducting Warden training classes.

SOAP, CELLOPHANE AND GERMS

OUR FIGHT AGAINST germs has been going on for hundreds of years. Germs are not a new weapon; nonetheless, we must not let familiarity breed contempt. We cannot overlook the possibility of biological warfare being used if this country ever suffers an all-out, surprise attack, designed to knock us off our feet. The U. S. Army considers germ warfare to be a "major danger" not because of the possibility of mass epidemics, but because of its possible use to sabotage industry's production, and as a means to panic the population. Whether it would be used against man, animals, crops, or all three, no one can be sure.

Last month the Defender carried an article on gas warfare. BW, (or biological warfare) has some characteristics in common with gas:

- 1) Germs may be released in the air and travel downwind like a gas cloud;
- 2) Germs can be inhaled;
- 3) Germs can contaminate clothing, equipment, food, and water;
- 4) Some germs may linger a considerable time in a given area;
- 5) Germs attack the body, as gas does, through nose, mouth, or skin.
- 6) As with many gases, you cannot see, feel, taste, or smell germs spread in a BW attack.

Germ warfare is also different in certain particulars:

- 1) None of the five senses nor chemical detectors can detect germ warfare; this can only be done by careful laboratory tests.
- 2) The time between exposure and the beginning of symptoms is usually a matter of days rather than hours or minutes.
- 3) Those exposed react very differently—some violently, some mildly, others not at all.

What can the average person do to protect himself?

Most germs are killed by the usual

familiar methods, such as boiling or cooking, using soap and water, exposing to sunlight, using disinfectants, etc.

The first line of defense is the natural resistance of the body.

Top physical condition, careful cleanliness and regular "shots" against the familiar diseases will protect most people to a great degree. Clothing will also give a marked degree of protection, keeping out germs and disease-bearing insects, such as mosquitoes, fleas, and ticks; all cuts and sores should be kept bandaged.

Since BW is hard to detect, every clue counts. Prompt reporting of strange illnesses might lead to the prevention of many cases. Clues that would be important if found in any quantity would include sick animals, several animals dead without visible cause, sick-looking plants, smokes and mists of unknown nature, low-flying spraying planes (not necessarily military).

If a warning has been given, or you suspect that B.W. might be in use in your locality:

- 1) Don't eat uncooked food, such as berries, lettuce, and the like.
- 2) Don't bathe in lakes and ponds.
- 3) Don't touch animals.
- 4) *DO* roll down your sleeves, button clothing, wear gloves if available, and bandage small cuts and scrapes.
- 5) *DO* scrub yourself carefully, concentrating on face and hands, including teeth, roof of mouth, and fingernails.
- 6) *DO* change your clothing if you think it may have been contaminated. Don't burn it; a good soapy wash will do.

Germ warfare, like gas, is a *special* weapon for use against *special* targets. It will not destroy entire cities. It is most likely to be used in such places as industrial cafeterias, livestock

centers, or feed distribution points, if at all. Our normal inspection processes will make it difficult to use it effectively in those areas.

The stories you read of an ounce of poison killing millions of people, are pure fiction. The practical problem of distributing such germs makes that an impossibility. Nevertheless, the *fear* of such epidemics could be a dangerous weapon in itself. The enemy may try to spread terrifying stories far and wide, prior to a germ warfare attack. He would quite possibly try to use biological warfare as a psychological weapon to panic the public if he could. Actually, the days of widespread epidemics, like the old bubonic plague, are over, thanks to the fine health programs, and the new drugs which now exist.

America is probably the most hygienic, antiseptic, germ-conscious country in the world—to the point where other nations laugh at us. It would be extremely hard to wage effective germ warfare against us *unless we allow ourselves to be panicked by rumors.*

Don't believe the tall stories that will doubtless be circulated along with the germs if this weapon is ever used. The stories would be more destructive than the germs. A clean body and house; cooked foods; clean water; routine "shots" for the family;—these are the defenses that every one of us has at our disposal, and uses every day. Stepped up sanitary procedures and a refusal to pass on or believe the "scare" stories will take the Sunday punch from any BW attack on us. Do not let the enemy have the satisfaction of panicking this cellophane-wrapped country of ours!

H-BOMB

(Continued from page 1)

rapid accumulation of an H-bomb stockpile, then, the published literature of theoretical physics suggests, this probably involves some new use of lithium, an abundant and relatively cheap material.

The first hydrogen explosion in 1952 wiped out an island leaving a crater a mile wide, and 175 feet deep. The Eniwetok test, known as "Operation Ivy" did not test an actual weapon, but tested devices leading to a hydrogen bomb. During the intervening two years so much progress has been made that shortly new tests are to be made in the mid-pacific proving grounds, including the first

trial of an actual combat-designed hydrogen bomb. As we go to press, construction crews are rushing to complete the final installation of intricate instrument systems at the Bikini and Eniwetok atolls in the Marshall Islands. Because official reference is to thermonuclear "weapons," rather than the previously termed "device," the supposition is that an H-bomb will be dropped from an aircraft.

Films of "Operation Ivy," including a dramatic sequence showing the "device" knocking the cap off an island and leaving a huge cavity in the ocean bed, have been shown to the members of both Senate and House. If Rep. Sterling Cole, Chairman of the Joint Atomic Energy Commission has his way, they will shortly be available

also for widespread showing to the public. A serious and competent legislator, Mr. Cole admits that he is awed by the atomic story as it continues to unfold before his committee. He believes that all members of Congress are going to have to pay a great deal more attention to it if they are to legislate wisely for the country's safety and its future.

After seeing the film, House members said the sight was "appalling and awe-inspiring." Said Rep. Kit Clardy of Michigan, "It was the most devastating sight I think I have ever seen." If it arouses keener interest and a sharper realization of our defense needs among Congressmen, we can be glad they were shown the film prior to their coming battle over the defense budget.

IF YOU WERE A COMMUNIST ..

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IF YOU WERE a Communist, planning ways to hamper and hinder defense in this country, what would you do?

1) You would spread the word that Russia is incapable of making an atomic attack on this country, and has no intention of doing so. You would imply that all who were preparing for this possibility were "warmongers" who needed their heads examined.

Truth of the matter: *Although many Americans fall for this "It will never happen here" routine, the fact is that Russia's war machine grows stronger and more versatile every day. Russia could deliver a devastating blow. Her intentions are unknown, but suspect.*

2) You would spread the word that the A-Bomb is so destructive, the picture so hopeless, that there is nothing anyone can do about it.

Truth of the matter: *Each bomb can destroy only a very limited area. All those people in the surrounding areas would badly need plans, organization, and leadership, following an attack. This nation covers a vast extent. Even the most drastic attack would destroy only a small fraction of our land.*

3) You would try to make people think America's Air Force, radar screen, new anti-aircraft weapons are so foolproof that no enemy planes possibly could get through; you would make them believe that home defense is therefore a waste of money.

Truth of the matter: *The Air Force leaders still say 7 out of 10 planes could get through; the best they could hope would be to down 3 out of 10.*

4) If you were working for Uncle Joe's successor, Georgi, you would try to make people think only of attack by air; you would hope they would forget your growing submarine fleet, your high-powered guided missile program, and your arsenal of chemical, biological, and other weapons.

Truth of the matter: *Russia has a versatile, hard-hitting array of many types of weapon, capable of being used in a wide variety of ways.*

5) You would preach far and wide that CD is being agitated for political purposes (such as to increase military appropriations) or that its leaders have other ulterior motives.

Truth of the matter: *Thousands of men and women are giving devoted and earnest effort all over this country in order to prepare wisely for what may lie ahead.*

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6) You would over-estimate and stress any mistakes or confusion that you could find, in order to undermine people's confidence in their CD leaders. Every chance you got, you would spread out headlines saying "C. D. a failure",—"No progress visible in C. D."—"C. D. leaders contradict each other", etc., etc.

The truth of the matter: *Although admittedly there has been confusion in some places because Civil Defense is so new in the life of this nation, nevertheless, remarkable progress has been made in the past three years. This is evidenced by the work of CD groups in natural disasters, by the growing number of active volunteers, by the improving test alerts, and by the increased emergency resources in most communities.*

7) You would confuse all the people you could, by saying, "Don't take shelter on a red alert—head for the country instead. Only dopes will bury themselves in the ground."

The truth of the matter: *As yet we have no assurance at all that we can have more than 10-15 minutes warning at best on an air attack; we know perfectly well that we will have no warning from a guided missile attack, sea attack, or sabotage attack. "Taking to the road" would result in traffic jams, congestion, and chaos. It would suit the Communists right down to the ground. The fact is that a populace trained to take cover immediately can cut its losses by 50%..*

If you were a Communist, you would know that all you could do to confuse and upset Civil Defense would be to your advantage. You would never miss an opportunity to sneer, mock, and

discredit Civil Defense in every possible way.

You are presumably NOT a Communist, but a loyal American citizen. Are you guilty, however, of having spread any of these lines, by repeating them yourself? If so, to some degree you have been helping the enemy and doing your bit to sabotage the defense effort. What can you do to help, rather than hinder it?

1) You can stand behind your C. D. officials, backing them up with your support, building people's confidence in their ability, and giving them your own undivided loyalty;

2) You can spread the word that Civil Defense IS necessary—no radar screen or Air Force can guarantee to keep out a determined enemy;

3) You can make known the constructive progress that C. D. is making throughout this State and the nation.

4) You can help to educate your neighbors to the facts that A-bombs destroy only limited mileage. Any given individual's chance of survival is good, therefore each had better know what to do, where to go, and who to contact following a disaster.

Word of mouth destruction can be an insidious weapon. Word of mouth support, however, can be an equally constructive force.

Don't side, even by mistake, with the Communist agents in our midst. Don't pass on their false statements, even unintentionally. You do quite as much harm as if you passed on the comments on purpose. Think what you are saying; build, don't wreck, the organization which is being put together painfully and laboriously for the protection of this land.